Comparisons of Job Characteristics

Focus Occupation: Engineering Technicians, Except Drafters, All Other (17-3029) Associated Occupation: Civil Engineering Technicians (17-3022)

Compare Knowledge
Compare Skills
Compare Abilities
Compare Detailed Work Activities
Compare Tools and Technologies

| << | Focus occupation element is much lower |
|----|--|
| < | Focus occupation element is lower |
| 0 | Focus occupation element is at a similar level |
| > | Focus occupation element is at a higher level |
| >> | Focus occupation element is at a much higher level |

Knowledge

Similarity of Focus Occupation to Associated Occupation: 57

Focus Occupation: Engineering Technicians, Except Drafters, All Other (17-3029)

Associated Occupation: Civil Engineering Technicians (17-3022)

| Associated Occupation's Key Knowledge Elements | Average Rating, All Occupations | Associated Occupation's Rating | Focus Occupation's Rating | Evaluation of Focus Occupation | |
|---|---------------------------------------|--------------------------------------|---------------------------------|--------------------------------|---|
| Engineering and Technology | 5.7 | 15.6 | 17.6 | > | Current knowledge level is likely sufficient |
| Building and Construction | 4.0 | 15.1 | 4.5 | << | Extensive education and/or training may be required |
| Mathematics | 9.2 | 15.0 | 16.6 | > | Current knowledge level is likely sufficient |
| Design | 5.2 | 14.1 | 15.1 | 0 | Current knowledge level may be sufficient |
| Public Safety and Security | 6.9 | 10.6 | 7.3 | << | Extensive education and/or training may be required |
| Geography | 3.9 | 9.0 | 3.7 | << | Extensive education and/or training may be required |
| Transportation | 4.6 | 8.6 | 5.2 | << | Extensive education and/or training may be required |

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 48

Focus Occupation: Engineering Technicians, Except Drafters, All Other (17-3029) Associated Occupation: Civil Engineering Technicians (17-3022)

| Associated Occupation's Key Skills Elements | Average Rating, All Occupations | Associated Occupation's Rating | Focus Occupation's Rating | Evaluation of Focus Occupation | |
|--|---------------------------------------|--------------------------------------|---------------------------------|--------------------------------|---------------------------------------|
| Reading Comprehension | 10.7 | 12.9 | 12.3 | 0 | Current skill level may be sufficient |
| Mathematics | 6.2 | 8.7 | 10.8 | > | Skill level is likely sufficient |
| Operations Analysis | 5.0 | 7.9 | 7.2 | 0 | Current skill level may be sufficient |

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities

Similarity of Focus Occupation to Associated Occupation: 94

Focus Occupation: Engineering Technicians, Except Drafters, All Other (17-3029) Associated Occupation: Civil Engineering Technicians (17-3022)

| Associated Occupation's Key Abilities Elements | Average Rating, All Occupations | Associated Occupation's Rating | Focus Occupation's Rating | Evaluation of Focus Occupation | |
|---|---------------------------------------|--------------------------------------|---------------------------------|--------------------------------|--|
| Oral Comprehension | 12.5 | 12.8 | 13.6 | 0 | Current ability level may be sufficient |
| Near Vision | 11.1 | 12.6 | 12.4 | 0 | Current ability level may be sufficient |
| Oral Expression | 12.4 | 12.2 | 12.7 | 0 | Current ability level may be sufficient |
| Deductive Reasoning | 10.6 | 11.4 | 12.9 | > | Current ability level is likely sufficient |
| Visualization | 7.5 | 11.4 | 12.3 | 0 | Current ability level may be sufficient |
| Written Comprehension | 11.0 | 11.4 | 12.7 | > | Current ability level is likely sufficient |
| Written Expression | 9.8 | 11.4 | 11.2 | 0 | Current ability level may be sufficient |
| Problem Sensitivity | 11.1 | 10.8 | 12.6 | > | Current ability level is likely sufficient |
| Mathematical Reasoning | 6.3 | 10.3 | 11.2 | 0 | Current ability level may be sufficient |
| Number Facility | 6.3 | 9.2 | 10.2 | > | Current ability level is likely sufficient |
| Memorization | 5.6 | 6.9 | 7.5 | 0 | Current ability level may be sufficient |

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

There are no common work activities.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 70

Focus Occupation: Engineering Technicians, Except Drafters, All Other (17-3029) Associated Occupation: Civil Engineering Technicians (17-3022)

| Tools and Technologies | Exclusivity |
|---|-------------|
| Chemical evaluation instruments and supplies | 10 |
| Computer data input devices | 2 |
| Computer printers | 2 |
| Computers | 1 |
| Content authoring and editing software | 1 |
| Cutting and crimping and punching tools | 3 |
| Electrochemical measuring instruments and accessories | 9 |
| Fluid mechanics equipment | 11 |
| Indicating and recording instruments | 2 |
| Industry specific software | 1 |
| Information exchange software | 1 |
| Laboratory heating and drying equipment | 13 |
| Laboratory ovens and accessories | 15 |

| Length and thickness and distance measuring instruments | 2 |
|--|----|
| Measuring and layout tools | 3 |
| Mechanical instruments | 14 |
| Metals and metallurgy and structural materials testing instruments | 15 |
| Network applications software | 1 |
| Pipettes and liquid handling equipment and supplies | 16 |
| Safety apparel | 4 |
| Temperature and heat measuring instruments | 6 |
| Transducers | 23 |
| Vision protection and accessories | 3 |
| Weight measuring instruments | 7 |

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.